HCD-H490/H490M

SERVICE MANUAL

AEP Model

- This Service Manual covers only the difference from the HCD-H450/H450M. Therefore, please refer to also the HCD-H450/H450M Service Manual (9-959-372-11) in performing the repair.

  - For the German model of HCD-H490M, refer to the German model of HCD-H450.
  - HCD-H490 is the tuner, deck, CD and amplifier section in FH-B490.
  - HCD-H490M is the tuner, deck, CD and amplifier section in MHC-490.

DIFFERENCES OF SPECIFICATION

Page	HCD-H450/H450M	HCD-H490/H490M
2	**General** Destination: AEP, German, Italian, East European model Power requirements: 220 — 230 V AC, 50/60 Hz Power consumption: 55 W	**General** Destination: AEP, German, Italian model Power requirements: 220 — 230 V AC, 50/60 Hz Power consumption: 60 W

1. ELECTRICALLY DIFFERENTE PARTS LIST

	HCD-H450/H450M			HCD-H490/H490M		
Page	Ref.No.	Part No.	Description	Ref.No.	Part No.	Description
47	*	A-4369-109-A	DISPLAY BOARD, COMPLETE (H450:AEP/H450M:AEP)	*	A-4369-118-A	DISPLAY BOARD, COMPLETE (AEP,G)
	*	A-4369-118-A	DISPLAY BOARD, COMPLETE (H450:G)	*	A-4377-169-A	DISPLAY BOARD, COMPLETE (H490:IT)
	*	A-4369-119-A	DISPLAY BOARD, COMPLETE (H450:IT)			
53	D201	8-719-200-82	DIODE 1ES2	D201	8-719-024-99	DIODE 1ES2-NTA2B
58	RV730	1-223-608-11	RES, VAR, CARBON 100K/100K	RV730	1-223-652-12	RES, VAR, CARBON 100K/100K (VOLUME)
	*	A-4369-122-A	POWER BOARD, COMPLETE (H450:G,IT)	*	A-4371-543-A	POWER BOARD, COMPLETE (H490:G,IT/H490M:G)
59	D903	8-719-200-82	DIODE 1ES2	D903	8-719-024-99	DIODE 1ES2-NTA2B

使用時は添付資料も参照のこと
Refer to the additional documents.

MINI Hi-Fi COMPONENT SYSTEM

SONY®

2. EXPLODED VIEW DIFFERENT PARTS LIST

	HCD-H450/H450M			HCD-H490/H490M		
Page	Ref.No.	Part No.	Description	Ref.No.	Part No.	Description
39	1	A-4353-939-A	LID (A) ASSY, CASSETTE	1	A-4361-316-A	LID (A) ASSY, CASSETTE
	2	A-4353-941-A	LID (B) ASSY, CASSETTE (H450:AEP, G, IT)	2	A-4361-317-A	LID (B) ASSY, CASSETTE (H490/H490M:G)
	2	A-4353-944-A	LID (B) ASSY, CASSETTE (H450M:CND, AEP, UK, EE)	2	A-4361-330-A	LID (B) ASSY, CASSETTE (H490M:AEP)
	3	4-964-858-01	KNOB (V)	3	4-964-858-21	KNOB (V)
	*8	A-4369-122-A	POWER BOARD, COMPLETE (H450:G, IT)	*8	A-4371-543-A	POWER BOARD, COMPLETE (H490:G, IT/H490M:G)
40	51	A-4353-938-A	PANEL ASSY, FRONT (H450:AEP, G, IT/H450M:CND, AEP, UK, EE)	51	A-4361-315-A	PANEL ASSY, FRONT
	52	4-963-655-01	BUTTON (CDP)	52	4-963-655-11	BUTTON (CDP)
	53	4-964-103-01	BUTTON (CD)	53	4-964-103-11	BUTTON (CD)
	54	4-964-111-01	BUTTON (TA)	54	4-964-111-11	BUTTON (TA)
	56	4-964-102-11	BUTTON (POWER/FUNCTION) (H450:AEP, G, IT/H450M:AEP, UK, EE)	56	4-964-102-21	BUTTON (POWER/FUNCTION)
	*57	A-4369-109-A	DISPLAY BOARD, COMPLETE (AEP)	*57	A-4369-118-A	DISPLAY BOARD, COMPLETE (AEP, G)
	*57	A-4369-118-A	DISPLAY BOARD, COMPLETE (H450:G)	*57	A-4377-169-A	DISPLAY BOARD, COMPLETE (H490:IT)
	*57	A-4369-119-A	DISPLAY BOARD, COMPLETE (H450:IT)			
	60	4-963-286-11	PANEL, LOADING	60	4-963-286-21	PANEL, LOADING

9-959-943-11

Sony Corporation
Consumer A&V Products Company
Home A&V Products Div.

English
94L1846-1
Printed in Japan
©1994.12
Published by Home A&V Products Div. Quality Engineering Dept.

HCD-H490/H490M

SONY
SERVICE MANUAL

AEP Model

SUPPLEMENT-1

File this supplement with the service manual.

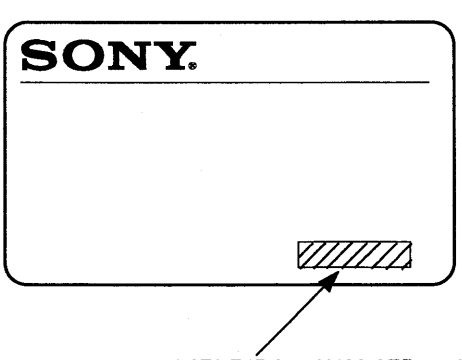
Subject : • CE Type ADDITION

(ENG-95023)

- The contents of this supplement applies the following models in the Identification, so refer to the previous service manual.

MODEL IDENTIFICATION (How to identify CE Type)

— Specification Labels —



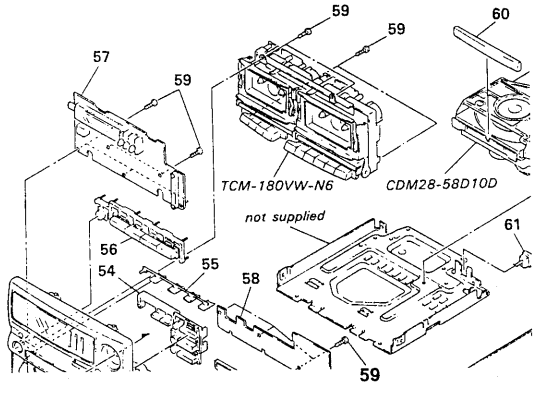
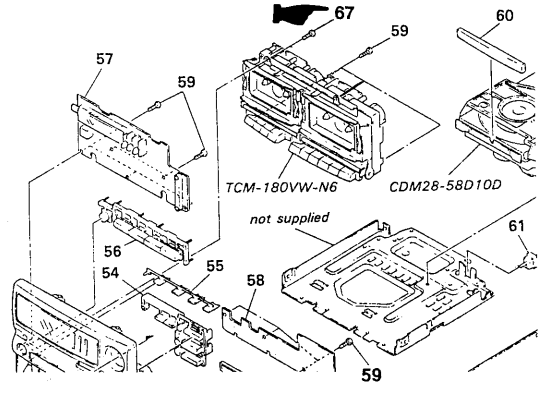
4-976-745-0□ : H490 AEP model
4-976-746-0□ : H490 German model
4-976-747-0□ : H490 Italian model
4-976-748-0□ : H490M AEP model
4-976-749-0□ : H490M German model

NOTE:

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.
- Abbreviation
  G : German model
  IT : Italian model

DIFFERENCE TABLE

☛ : Changed portion

Page	HCD-H490/H490M (Former Type)				HCD-H490/H490M (CE Type)			
	Ref.No	Part No	Description	Remark	Ref.No	Part No	Description	Remark
39	2	A-4361-330-A	LID (B) ASSY, CASSETTE		2	A-4361-317-A	LID (B) ASSY, CASSETTE	
	* 8	A-4369-111-A	POWER BOARD, COMPLETE		* 8	A-4378-676-A	POWER BOARD, COMPLETE	
	13	4-951-620-11	SCREW (2.6X10), +BVTT		13	4-951-620-01	SCREW (B2.6X8), +BVTP	
40	59	4-951-620-11	SCREW (2.6X10), +BVTT		59	4-951-620-01	SCREW (2.6X8), +BVTP	
	59	4-951-620-11	SCREW (2.6X10), +BVTT		67	4-951-620-31	SCREW (2.6), +BVTP	
	* 64	A-4369-107-A	MAIN BOARD COMPLETE (AEP)		* 64	A-4378-582-A	MAIN BOARD COMPLETE (AEP)	
	* 64	A-4369-115-A	MAIN BOARD COMPLETE (H490:G, IT/H490M:G)		* 64	A-4378-583-A	MAIN BOARD COMPLETE (H490:G, IT/H490M:G)	
								

IC PIN FUNCTIONS

- **IC351 TMP87CH46N-4106**

Pin No.	Pin Name	I/O	Function
1	DATA	O	Command data to CXD2515Q.
2	CLK	O	Command clock to CXD2515Q.
3	PLAY	O	LED of PLAY.
4	SUBQ	I	To Q code output of CXD2515Q.
5	SQCLK	O	Clock of on read Q code.
6	PRGL	–	Not used.
7	XLT	O	For CXD2515Q latch.
8	SCOR	I	Large frame syncronization signal. 75Hz.
9	PAUSE	O	LED of PAUSE.
10	ICSW	O	CD power supply control pin. OFF: L, ON: H.
11	AMUTE	O	Mute. To CXD2515Q.
12	SCLK	O	Servo mode for read clock.
13	LDON	O	Laser diode ON/OFF.
14	——	–	Not used.
15	——	–	Not used.
16	SENSE	I	SENSE of CXD2515Q.
17	TEST	I	Connect to GND.
18	RESET	I	Reset pin of microcomputer.
19	X1	I	Oscillator connecting input pin. 8MHz.
20	X2	O	Oscillator connecting output pin. 8MHz.
21	GND	–	GND
22	VAREF	I	Reference voltage of A/D change.
23	KEYIN0	I	A/D key input
24	KEYIN1	I	A/D key input
25	KEYIN2	I	A/D key input
26	DPCLK	O	Display clock
27	DPDAT0	O	Display data
28	DPDAT1	O	Display data
29	DPDAT2	O	Display data
30	DPDAT3	O	Display data
31	EMPH	O	Emphasis control
32	KEYREQ	I	Key request
33	AUBIN	I	AU BUS input pin
34	AUBOUT	O	AU BUS output pin
35	LODOUT	O	Tray out
36	LODIN	O	Tray in
37	OUTSW	I	Tray out switch
38	INSW	I	Tray in switch
39	A-FUNC	I	Auto function ON/OFF select
40	ADJ	I	CD test mode pin (ADJ). Normally, 5V pull up.
41	AFADJ	I	CD test mode pin (AFADJ). Normally, 5V pull up.
42	+5V	–	+5V power supply pin

- **IC501 μPD78042AGF-012-3B9**

Pin No.	Pin Name	I/O	Function
1	7G	O	FL tube digit output
2	6G	O	FL tube digit output
3	5G	O	FL tube digit output
4	4G	O	FL tube digit output
5	3G	O	FL tube digit output
6	2G	O	FL tube digit output
7	1G	O	FL tube digit output
8	VDD	–	Microcomputer power (5V)
9	CL	O	Serial clock output to LC7218 (PLL IC).
10	SO/IF COUNT NG	O	Serial data output to LC7218 (PLL IC).
11	SI	I	Serial data input from LC7218 (PLL IC).
12	CE/TIMER CLOCK	I	Chip enable input from LC7218 (PLL IC).
13	TUNED IN	I	Modulation signal from tuner block. (L ••• Field)
14	STEREO IN	I	Stereo signal from tuner block. (L ••• FM STEREO received)
15	MUTING	O	Audio mute (L: Mute)
16	AUX. OUT	–	Not used.
17	RESET	–	Microcomputer reset pin
18	FUNCTION A	O	Function control
19	FUNCTION B	O	Function control
20	AVSS	–	A/D GND for key input.
21	DISPLAY. DATA. 3	I	CD display data bit 3
22	DISPLAY. DATA. 2	I	CD display data bit 2
23	DISPLAY. DATA. 1	I	CD display data bit 1
24	DISPLAY. DATA. 0	I	CD display data bit 0
25	AUB. OUT	O	AU BUS output
26	POWER ON/OFF	O	Power on/off
27	KEY IN1	I	Key input (A/D change line 1)
28	KEY IN2	I	Key input (A/D change line 2)
29	AVDD	–	A/D power for key input (5V)
30	AVREF	–	A/D reference voltage (5V)
31	CD. BUSY	I	At H, CD is Active. (At H, tuner is fundamentally not operated.)
32	——	–	Not used.
33	GND	–	Microcomputer GND
34	X1	–	Crystal connection pin for Main • clock oscillator.
35	X2	–	Crystal connection pin for Main • clock oscillator.
36	POWER. MUTE	–	Not used.
37	TAPE. LED	O	Tape function LED
38	CD. LED	O	CD function LED
39	TUNER. LED	O	Tuner function LED
40	PHONO/VIDEO. LED	O	PHONO function LED

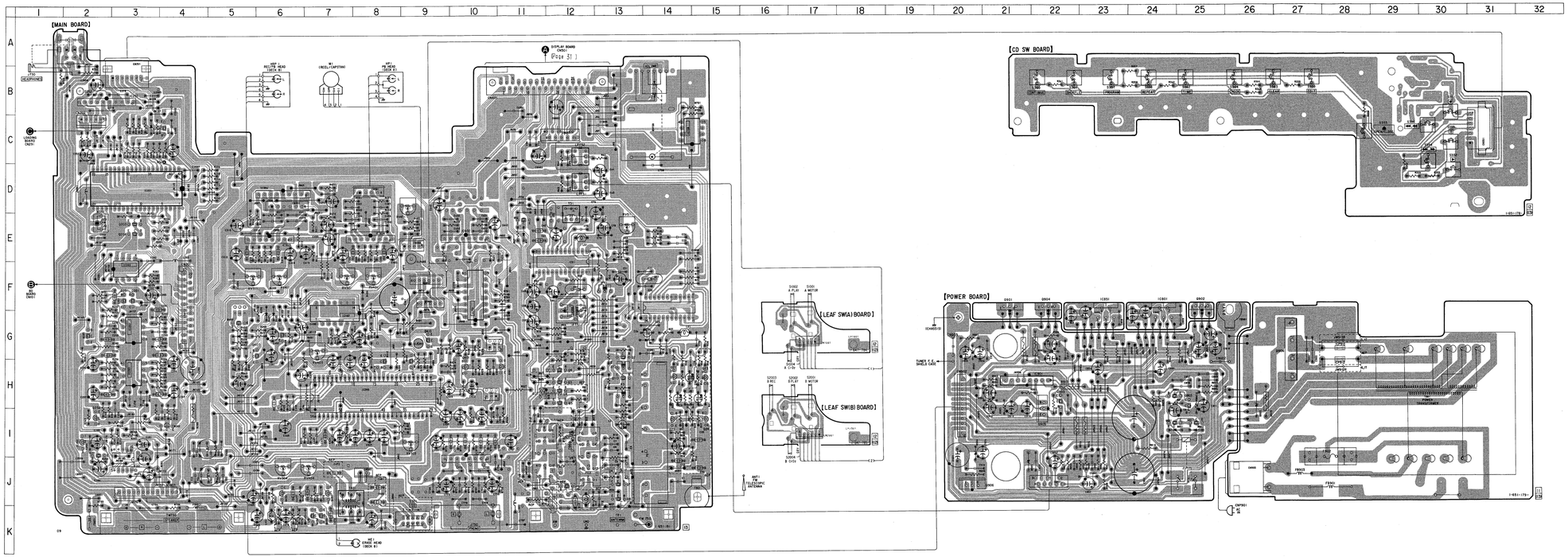
Pin No.	Pin Name	I/O	Function
41	DBFB	–	DBFB ON/OFF
42	K-PON	–	Not used.
43	K-PON•LED	–	Not used.
44	HOLD	I	Power cut detection pin (Normally: H, AC no connect: L)
45	CD. CLOCK	I	CD display data clock
46	SIRCS IN	I	SIRCS input
47	AUB. IN	I	AU BUS input
48	——	–	Connect to GND.
49	FUNCTION. C	–	Not used.
50	VOL. DOWN	O	Volume control (VOL DOWN)
51	VOL. UP	O	Volume control (VOL UP)
52	VDD	–	Microcomputer power (5V)
53	——	–	Not used.
54	DIODE. IN2	I	Distination • model discrimination input
55	DIODE. IN1	I	Distination • model discrimination input
56	S20	–	Not used.
57	S19	O	Distination • model discrimination output
58	S18	O	Not used.
59	S17	–	Not used.
60	S16	O	Distination • model discrimination output
61	S15	O	Not used.
62	S14	–	Not used.
63	——	–	Not used.
64	S0	O	FL tube segment output
65	S1	O	FL tube segment output
66	S2	O	FL tube segment output
67	S3	O	FL tube segment output
68	S4	O	FL tube segment output
69	S5	O	FL tube segment output
70	S6	O	FL tube segment output
71	V. LOAD	–	Minus voltage for FL tube.
72	S7	O	FL tube segment output
73	S8	O	FL tube segment output
74	S9	O	FL tube segment output
75	S10	O	FL tube segment output
76	S11	O	FL tube segment output
77	S12	O	FL tube segment output
78	——	O	Not used.
79	9G	O	FL tube digit output
80	8G	O	FL tube digit output

PRINTED WIRING BOARD — MAIN SECTION —

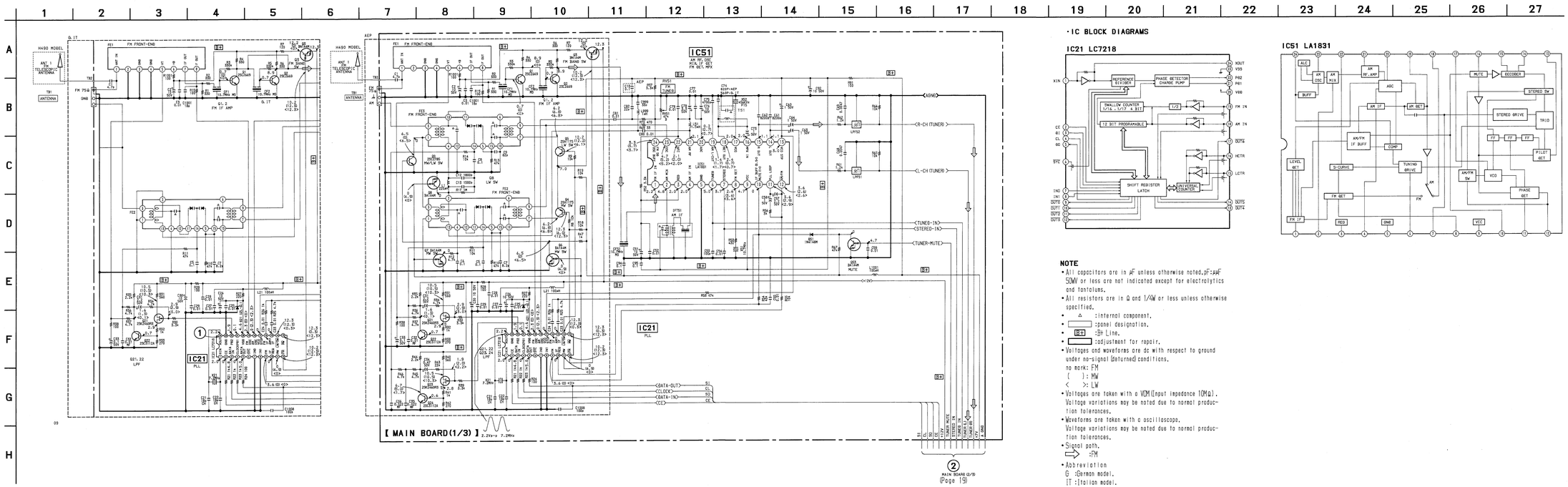
• **Semiconductor Location**

Ref. No.	Location	Ref. No.	Location
D21	G-14	Q2	H-13
D51	F-11	Q3	H-12
D201	J-4	Q4	H-12
D221	C-3	Q5	H-12
D252	B-2	Q6	H-12
D403	H-6	Q7	J-13
D404	F-8	Q8	K-13
D405	G-6	Q9	J-12
D407	G-6	Q21	H-14
D408	G-5	Q22	I-14
D409	E-9	Q23	H-15
D451	G-7	Q24	I-15
D601	I-25	Q53	E-11
D802	I-25	Q201	F-3
D901	H-22	Q202	I-4
D902	H-20	Q203	E-3
D903	I-26	Q204	E-3
D904	J-21	Q205	G-2
D905	J-22	Q221	C-4
D906	H-27	Q251	F-3
		Q252	I-2
IC21	G-14	Q291	J-3
IC51	F-12	Q301	H-11
IC201	G-3	Q401	H-10
IC202	H-3	Q407	H-6
IC203	F-3	Q408	G-6
IC251	J-3	Q409	G-5
IC252	I-2	Q410	G-9
IC255	B-3	Q411	H-9
IC303	H-8	Q412	H-8
IC304	E-8	Q451	K-7
IC305	E-6	Q452	K-6
IC306	D-6	Q453	K-7
IC351	D-3	Q454	K-7
IC407	G-8	Q801	I-25
IC602	E-10	Q802	I-25
IC730	C-15	Q803	I-25
IC750	J-10	Q804	H-25
IC751	G-10	Q901	G-21
IC801	G-24	Q902	G-25
IC851	G-23	Q903	I-22
IC901	H-21	Q904	G-22
		Q905	I-22
Q1	H-13	Q906	J-20

Note:
- ⟜ : parts extracted from the component side.
- ■ : parts mounted on the conductor side.
- △ : internal component.
- ▒ : Pattern from the side which enable seeing.
- Abbreviation
  G : German model.
  IT : Italian model.



SCHEMATIC DIAGRAM — TUNER SECTION —



• IC BLOCK DIAGRAMS

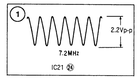
IC21 LC7218

IC51 LA1831

NOTE

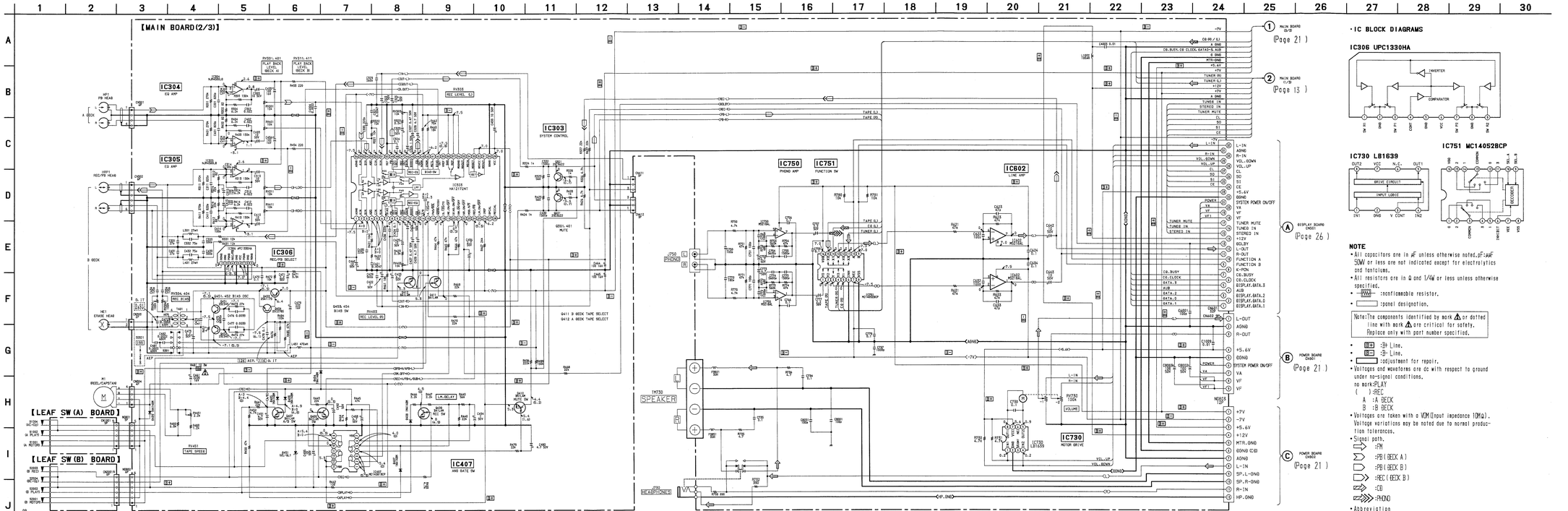
- All capacitors are in μF unless otherwise noted. pF: μμF
  50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- △ : internal component.
- ▭ : panel designation.
- B+ : B+ Line.
- ▬ : adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark: FM
  ( ): MW
  < >: LW
- Voltages are taken with a VOM (Input impedance 10MΩ).
  Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.
  Voltage variations may be noted due to normal production tolerances.
- Signal path.
  ⇨ : FM
- Abbreviation
  G : German model.
  IT : Italian model.

• Waveforms



SCHEMATIC DIAGRAM — DECK SECTION —

• See page 6 for Printed Wiring Board.



• IC BLOCK DIAGRAMS

IC306 UPC1330HA

IC751 MC14052BCP

IC730 L81639

NOTE

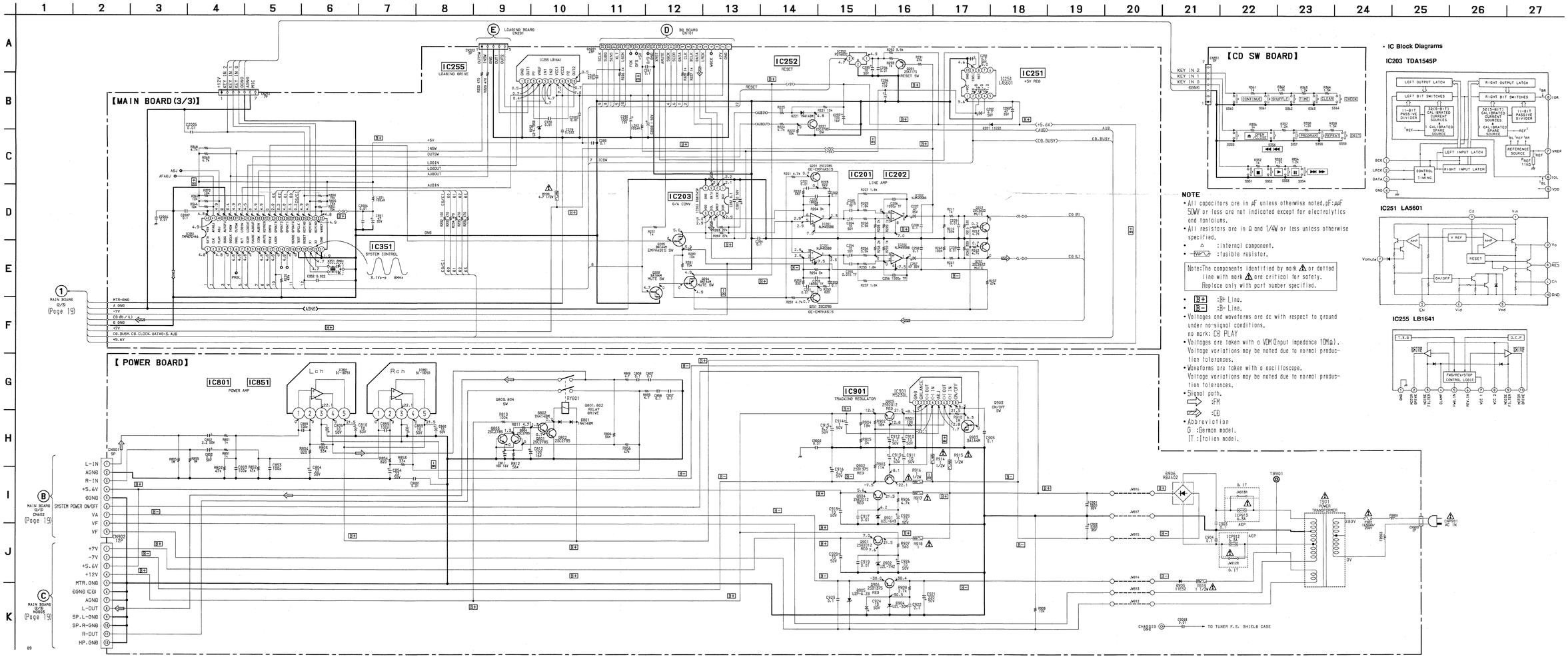
- All capacitors are in µF unless otherwise noted. pF: µµF
  50WV or less are not indicated except for electrolytics and tantaliums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- ▲ : nonflammable resistor.
- ▲ : panel designation.

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

- ▬▶ : B+ Line.
- ▬▶ : B– Line.
- ▬ : adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark : PLAY
  ( ) : REC
  A : A DECK
  B : B DECK
- Voltages are taken with a VOM (Input impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Signal path.
  ⇨ : PW
  ⇨ : PB (B DECK A)
  ⇨ : PB (B DECK B)
  ⇨ : REC (B DECK B)
  ⇨ : CD
  ⇨ : PHONO
- Abbreviation
  G : German model.
  IT : Italian model.

SCHEMATIC DIAGRAM — CD CONTROL/POWER SECTION —

- See page 3 for IC Pin Functions. (IC351)
- See page 6 for Printed Wiring Board.


【MAIN BOARD (3/3)】
【POWER BOARD】
【CD SW BOARD】
IC255 LOADING DRIVE
IC252 RESET
IC251 +5V REG
IC351 SYSTEM CONTROL
IC203 D/A CONV
IC201 IC202 LINE AMP
IC801 IC851 POWER AMP
IC901 TRACKING REGULATOR
IC251 LA5601
IC255 LB1641
IC203 TDA1545P
NOTE
• All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
• All resistors are in Ω and 1/4W or less unless otherwise specified.
• △ : internal component.
• ⚠ : fusible resistor.
Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.
• B+ : B+ Line.
• B− : B− Line.
• Voltages and waveforms are dc with respect to ground under no-signal conditions. no mark: CD PLAY
• Voltages are taken with a VOM (Input impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
• Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
• Signal path. : FM : CD
• Abbreviation G : German model. IT : Italian model.
• IC Block Diagrams

SCHEMATIC DIAGRAM — DISPLAY SECTION —

• See page 4 for IC Pin Functions. (IC501)

【DISPLAY BOARD】

FLUORESCENT INDICATOR TUBE
FL501

IC501
SYSTEM CONTROL-FL DRIVE
μPD78042

IC502
REMOTE SENSOR
GP1U50XB

IC540
POWER HOLD

IC541
RESET
PST600C

IC604
GRAPHIC EQUALIZER
M5243P12

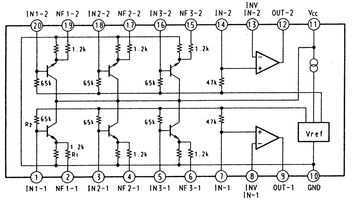
CN501
CN601
MAIN BOARD (2/3)
(Page 19)

S401
DOLBY

ON/STANDBY

• IC Block Diagram

IC604 M5243P12

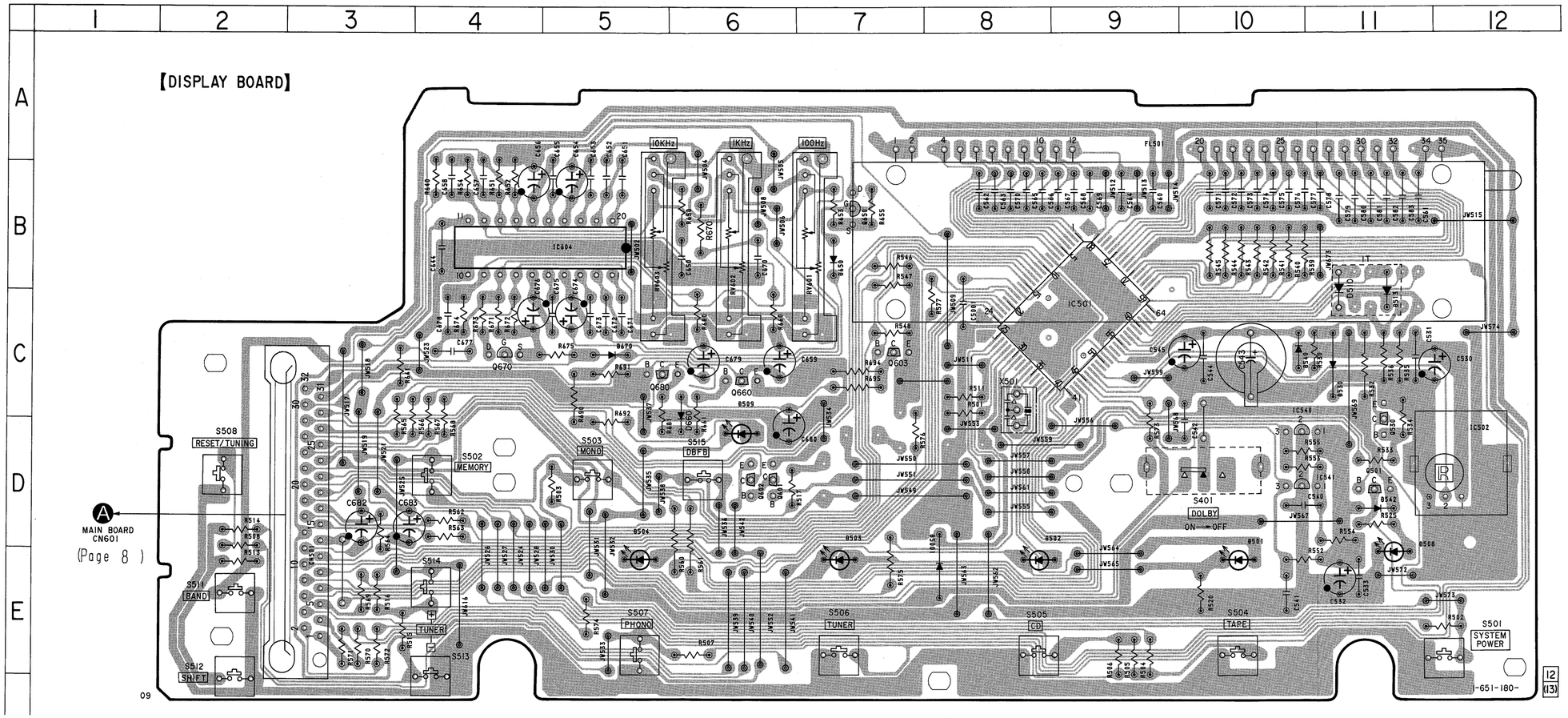


NOTE

- All capacitors are in μF unless otherwise noted. pF: μμF
  50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- △ :internal component.
- ▭ :panel designation.
- B+ :B+ Line.
- B- :B- Line.
- Voltages and waveforms are dc with respect to ground under no-signal (deturned) conditions.
  no mark: FM
- Voltages are taken with a VOM (Input impedance 10MΩ).
  Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.
  Voltage variations may be noted due to normal production tolerances.
- Signal path.
  ⇨ :FM
- Abbreviation
  IT : Italian model.

PRINTED WIRING BOARD — DISPLAY SECTION —

【DISPLAY BOARD】



- **Semiconductor Location**

Ref. No.	Location
D501	D-10
D502	D-9
D503	D-7
D504	D-5
D508	E-11
D509	C-6
D510	B-11
D513	C-11
D530	C-11
D540	C-11
D542	D-11
D650	B-7
D660	D-6
D670	C-5
D5001	D-8
IC501	C-9
IC502	D-12
IC540	C-11
IC541	D-11
IC604	B-4
Q501	D-11
Q530	D-11
Q601	D-6
Q602	D-6
Q603	C-7
Q650	B-7
Q660	C-6
Q670	C-4
Q680	C-5

Note:
- ○—— : parts extracted from the component side.
- —— : parts extracted from the conductor side.
- △ : internal component.
- ▒▒ : Pattern from the side which enable seeing.
- Abbreviation
  IT : Italian model.

CD SW DISPLAY

ELECTRICAL PARTS LIST

NOTE:

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board name.

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- RESISTORS
  All resistors are in ohms
  METAL: Metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F : nonflammable
- SEMICONDUCTORS
  In each case, u: μ , for example:
  uA...: μA..., uPA...: μPA..., uPB...: μPB..., uPC...: μPC..., uPD...: μPD...
- CAPACITORS
  uF : μF
- COILS
  uH : μH
- Abbreviation
  G : German model
  IT : Italian model

Ref. No.	Part No.	Description				Remark
*	A-4369-113-A	CD SW BOARD, COMPLETE				
		**********				
		< CONNECTOR >				
* CN351	1-569-768-11	SOCKET, CONNECTOR 7P				
		< RESISTOR >				
R352	1-249-417-11	CARBON	1K	5%	1/4W	F
R353	1-249-418-11	CARBON	1.2K	5%	1/4W	F
R354	1-249-418-11	CARBON	1.2K	5%	1/4W	F
R356	1-249-417-11	CARBON	1K	5%	1/4W	F
R357	1-249-418-11	CARBON	1.2K	5%	1/4W	F
R358	1-249-418-11	CARBON	1.2K	5%	1/4W	F
R359	1-249-419-11	CARBON	1.5K	5%	1/4W	F
R361	1-249-417-11	CARBON	1K	5%	1/4W	F
R362	1-249-418-11	CARBON	1.2K	5%	1/4W	F
R363	1-249-418-11	CARBON	1.2K	5%	1/4W	F
R364	1-249-419-11	CARBON	1.5K	5%	1/4W	F
		< SWITCH >				
S351	1-571-760-11	SWITCH, KEY BOARD (■)				
S352	1-571-760-11	SWITCH, KEY BOARD (▷)				
S353	1-571-760-11	SWITCH, KEY BOARD (▯▯)				
S354	1-571-760-11	SWITCH, KEY BOARD (▷▷|, ▶▶)				
S355	1-571-760-11	SWITCH, KEY BOARD (⏏ OPEN/CLOSE)				
S356	1-571-760-11	SWITCH, KEY BOARD (|◁◁, ◀◀)				
S357	1-571-760-11	SWITCH, KEY BOARD (PROGRAM)				
S358	1-571-760-11	SWITCH, KEY BOARD (REPEAT)				
S359	1-571-760-11	SWITCH, KEY BOARD (EDIT)				
S360	1-571-760-11	SWITCH, KEY BOARD (CONTINUE)				
S361	1-571-760-11	SWITCH, KEY BOARD (SHUFFLE)				
S362	1-571-760-11	SWITCH, KEY BOARD (TIME)				
S363	1-571-760-11	SWITCH, KEY BOARD (CLEAR)				
S364	1-571-760-11	SWITCH, KEY BOARD (CHECK)				

****

Ref. No.	Part No.	Description			Remark
*	A-4369-118-A	DISPLAY BOARD, COMPLETE (AEP, G)			
		**********			
*	A-4377-169-A	DISPLAY BOARD, COMPLETE (IT)			
		**********			
*	4-932-810-11	CUSHION (FL)			
*	4-942-301-01	HOLDER, FL TUBE			
		< CAPACITOR >			
C530	1-126-157-11	ELECT	10uF	20%	16V
C531	1-162-306-11	CERAMIC	0.01uF	30%	16V
C532	1-126-157-11	ELECT	10uF	20%	16V
C533	1-162-306-11	CERAMIC	0.01uF	30%	16V
C540	1-162-306-11	CERAMIC	0.01uF	30%	16V
C541	1-164-159-11	CERAMIC	0.1uF		50V
C542	1-164-159-11	CERAMIC	0.1uF		50V
C543	1-104-905-11	DOUBLE LAYERS	0.22F		5.5V
C544	1-164-159-11	CERAMIC	0.1uF		50V
C545	1-126-157-11	ELECT	10uF	20%	16V
C560	1-164-159-11	CERAMIC	0.1uF		50V
C561	1-164-159-11	CERAMIC	0.1uF		50V
C562	1-162-286-31	CERAMIC	220PF	10%	50V
C563	1-162-286-31	CERAMIC	220PF	10%	50V
C564	1-162-286-31	CERAMIC	220PF	10%	50V
C565	1-162-286-31	CERAMIC	220PF	10%	50V
C566	1-162-286-31	CERAMIC	220PF	10%	50V
C567	1-162-286-31	CERAMIC	220PF	10%	50V
C568	1-162-286-31	CERAMIC	220PF	10%	50V
C569	1-162-286-31	CERAMIC	220PF	10%	50V
C570	1-162-286-31	CERAMIC	220PF	10%	50V
C571	1-162-286-31	CERAMIC	220PF	10%	50V
C572	1-162-286-31	CERAMIC	220PF	10%	50V
C573	1-162-286-31	CERAMIC	220PF	10%	50V
C574	1-162-286-31	CERAMIC	220PF	10%	50V
C575	1-162-286-31	CERAMIC	220PF	10%	50V
C576	1-162-286-31	CERAMIC	220PF	10%	50V
C577	1-162-286-31	CERAMIC	220PF	10%	50V
C578	1-162-286-31	CERAMIC	220PF	10%	50V
C579	1-162-286-31	CERAMIC	220PF	10%	50V
C580	1-162-286-31	CERAMIC	220PF	10%	50V
C581	1-162-286-31	CERAMIC	220PF	10%	50V
C582	1-162-286-31	CERAMIC	220PF	10%	50V

Ref.No.	Part No.	Description			Remark
C583	1-162-286-31	CERAMIC	220PF	10%	50V
C644	1-164-159-11	CERAMIC	0.1uF		50V
C650	1-161-494-00	CERAMIC	0.022uF		25V
C651	1-162-303-11	CERAMIC	0.0033uF	30%	16V
C652	1-164-159-11	CERAMIC	0.1uF		50V
C653	1-164-159-11	CERAMIC	0.1uF		50V
C654	1-124-252-00	ELECT	0.33uF	20%	50V
C655	1-164-159-11	CERAMIC	0.1uF		50V
C656	1-124-254-00	ELECT	0.68uF	20%	50V
C657	1-162-282-31	CERAMIC	100PF	10%	50V
C658	1-162-301-11	CERAMIC	0.0015uF	30%	16V
C659	1-126-157-11	ELECT	10uF	20%	16V
C670	1-161-494-00	CERAMIC	0.022uF		25V
C671	1-162-303-11	CERAMIC	0.0033uF	30%	16V
C672	1-164-159-11	CERAMIC	0.1uF		50V
C673	1-164-159-11	CERAMIC	0.1uF		50V
C674	1-124-252-00	ELECT	0.33uF	20%	50V
C675	1-164-159-11	CERAMIC	0.1uF		50V
C676	1-124-254-00	ELECT	0.68uF	20%	50V
C677	1-162-282-31	CERAMIC	100PF	10%	50V
C678	1-162-301-11	CERAMIC	0.0015uF	30%	16V
C679	1-126-157-11	ELECT	10uF	20%	16V
C680	1-126-163-11	ELECT	4.7uF	20%	50V
C682	1-126-157-11	ELECT	10uF	20%	16V
C683	1-126-157-11	ELECT	10uF	20%	16V
C5001	1-164-159-11	CERAMIC	0.1uF		50V
		< CONNECTOR >			
CN501	1-764-306-11	HOUSING, CONNECTOR(PC BOARD)32P			
		< DIODE >			
D501	8-719-046-44	DIODE	SEL5221S (TAPE)		
D502	8-719-046-44	DIODE	SEL5221S (CD)		
D503	8-719-046-44	DIODE	SEL5221S (TUNER)		
D504	8-719-046-44	DIODE	SEL5221S (PHONO)		
D508	8-719-046-44	DIODE	SEL5221S (ON/STANDBY)		
D509	8-719-046-44	DIODE	SEL5221S (DBFB)		
D510	8-719-987-63	DIODE	1N4148M (IT)		
D511	8-719-987-63	DIODE	1N4148M (G)		
D513	8-719-987-63	DIODE	1N4148M (IT)		
D515	8-719-987-63	DIODE	1N4148M		
D530	8-719-987-63	DIODE	1N4148M		
D540	8-719-987-63	DIODE	1N4148M		
D542	8-719-987-63	DIODE	1N4148M		
D650	8-719-987-63	DIODE	1N4148M		
D660	8-719-987-63	DIODE	1N4148M		
D670	8-719-987-63	DIODE	1N4148M		
D5001	8-719-987-63	DIODE	1N4148M		

Ref.No.	Part No.	Description				Remark
		< FLUORESCENT INDICATOR >				
FL501	1-517-258-11	INDICATOR TUBE, FLUORESCENT				
		< IC >				
IC501	8-759-288-91	IC	uPD78042AGF012-3B9			
IC502	8-749-922-36	IC	GP1U50XB			
IC540	8-759-165-80	IC	PST600C-T			
IC541	8-759-165-84	IC	PST600G-T			
IC604	8-759-256-11	IC	M5243P12			
		< TRANSISTOR >				
Q501	8-729-422-57	TRANSISTOR	UN4111			
Q530	8-729-119-78	TRANSISTOR	2SC403SP-51			
Q601	8-729-900-80	TRANSISTOR	DTC114ES			
Q602	8-729-422-57	TRANSISTOR	UN4111			
Q603	8-729-422-57	TRANSISTOR	UN4111			
Q650	8-729-202-67	TRANSISTOR	2SK246-GR3			
Q660	8-729-119-78	TRANSISTOR	2SC403SP-51			
Q670	8-729-202-67	TRANSISTOR	2SK246-GR3			
Q680	8-729-119-78	TRANSISTOR	2SC2785-HFE			
		< RESISTOR >				
R501	1-249-419-11	CARBON	1.5K	5%	1/4W	F
R502	1-247-807-31	CARBON	100	5%	1/4W	
R503	1-249-406-11	CARBON	120	5%	1/4W	F
R504	1-249-406-11	CARBON	120	5%	1/4W	F
R505	1-249-407-11	CARBON	150	5%	1/4W	F
R506	1-249-408-11	CARBON	180	5%	1/4W	F
R507	1-249-409-11	CARBON	220	5%	1/4W	F
R508	1-249-410-11	CARBON	270	5%	1/4W	F
R511	1-249-419-11	CARBON	1.5K	5%	1/4W	F
R513	1-247-807-31	CARBON	100	5%	1/4W	
R514	1-249-406-11	CARBON	120	5%	1/4W	F
R515	1-249-406-11	CARBON	120	5%	1/4W	F
R516	1-249-407-11	CARBON	150	5%	1/4W	F
R520	1-249-409-11	CARBON	220	5%	1/4W	F
R525	1-249-411-11	CARBON	330	5%	1/4W	
R530	1-249-417-11	CARBON	1K	5%	1/4W	F
R532	1-249-429-11	CARBON	10K	5%	1/4W	
R533	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R534	1-249-429-11	CARBON	10K	5%	1/4W	
R535	1-249-433-11	CARBON	22K	5%	1/4W	
R536	1-249-433-11	CARBON	22K	5%	1/4W	
R539	1-249-441-11	CARBON	100K	5%	1/4W	
R540	1-249-441-11	CARBON	100K	5%	1/4W	
R541	1-249-441-11	CARBON	100K	5%	1/4W	
R542	1-249-441-11	CARBON	100K	5%	1/4W	
R543	1-249-441-11	CARBON	100K	5%	1/4W	
R544	1-249-441-11	CARBON	100K	5%	1/4W	
R545	1-249-441-11	CARBON	100K	5%	1/4W	

DISPLAY | LEAF SW (A) | LEAF SW (B)

Ref. No.	Part No.	Description				Remark
R546	1-249-429-11	CARBON	10K	5%	1/4W	
R547	1-249-429-11	CARBON	10K	5%	1/4W	
R548	1-249-429-11	CARBON	10K	5%	1/4W	
R552	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R553	1-249-417-11	CARBON	1K	5%	1/4W	F
R554	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R555	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R560	1-247-807-31	CARBON	100	5%	1/4W	
R561	1-247-807-31	CARBON	100	5%	1/4W	
R562	1-247-807-31	CARBON	100	5%	1/4W	
R563	1-247-807-31	CARBON	100	5%	1/4W	
R564	1-247-807-31	CARBON	100	5%	1/4W	
R565	1-247-807-31	CARBON	100	5%	1/4W	
R566	1-247-807-31	CARBON	100	5%	1/4W	
R567	1-247-807-31	CARBON	100	5%	1/4W	
R568	1-247-807-31	CARBON	100	5%	1/4W	
R569	1-247-807-31	CARBON	100	5%	1/4W	
R570	1-247-807-31	CARBON	100	5%	1/4W	
R571	1-247-807-31	CARBON	100	5%	1/4W	
R572	1-247-807-31	CARBON	100	5%	1/4W	
R573	1-247-807-31	CARBON	100	5%	1/4W	
R574	1-247-807-31	CARBON	100	5%	1/4W	
R575	1-247-807-31	CARBON	100	5%	1/4W	
R576	1-247-807-31	CARBON	100	5%	1/4W	
R577	1-247-807-31	CARBON	100	5%	1/4W	
R640	1-249-424-11	CARBON	3.9K	5%	1/4W	F
R641	1-249-424-11	CARBON	3.9K	5%	1/4W	F
R650	1-249-419-11	CARBON	1.5K	5%	1/4W	F
R651	1-249-441-11	CARBON	100K	5%	1/4W	
R652	1-249-441-11	CARBON	100K	5%	1/4W	
R653	1-247-807-31	CARBON	100	5%	1/4W	
R654	1-249-424-11	CARBON	3.9K	5%	1/4W	F
R655	1-247-903-00	CARBON	1M	5%	1/4W	
R660	1-249-417-11	CARBON	1K	5%	1/4W	F
R661	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R670	1-249-419-11	CARBON	1.5K	5%	1/4W	F
R671	1-249-441-11	CARBON	100K	5%	1/4W	
R672	1-249-441-11	CARBON	100K	5%	1/4W	
R673	1-247-807-31	CARBON	100	5%	1/4W	
R674	1-249-424-11	CARBON	3.9K	5%	1/4W	F
R675	1-247-903-00	CARBON	1M	5%	1/4W	
R680	1-249-417-11	CARBON	1K	5%	1/4W	F
R681	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R690	1-249-417-11	CARBON	1K	5%	1/4W	F
R691	1-249-429-11	CARBON	10K	5%	1/4W	
R692	1-249-423-11	CARBON	3.3K	5%	1/4W	F
R694	1-247-891-00	CARBON	330K	5%	1/4W	
R695	1-249-421-11	CARBON	2.2K	5%	1/4W	F

Ref. No.	Part No.	Description	Remark
		< VARIABLE RESISTOR >	
RV601	1-223-296-11	RES, VAR, SLIDE 250K/250K (100Hz)	
RV602	1-223-296-11	RES, VAR, SLIDE 250K/250K (1kHz)	
RV603	1-223-296-11	RES, VAR, SLIDE 250K/250K (10kHz)	
		< SWITCH >	
S401	1-692-883-11	SWITCH, SLIDE (DOLBY)	
S501	1-571-760-11	SWITCH, KEY BOARD (SYSTEM POWER)	
S502	1-571-760-11	SWITCH, KEY BOARD (MEMORY)	
S503	1-571-760-11	SWITCH, KEY BOARD (MONO)	
S504	1-571-760-11	SWITCH, KEY BOARD (TAPE)	
S505	1-571-760-11	SWITCH, KEY BOARD (CD)	
S506	1-571-760-11	SWITCH, KEY BOARD (TUNER)	
S507	1-571-760-11	SWITCH, KEY BOARD (PHONO)	
S508	1-571-760-11	SWITCH, KEY BOARD (PRESET/TUNING)	
S511	1-571-760-11	SWITCH, KEY BOARD (BAND)	
S512	1-571-760-11	SWITCH, KEY BOARD (SHIFT)	
S513	1-571-760-11	SWITCH, KEY BOARD (-)	
S514	1-571-760-11	SWITCH, KEY BOARD (+)	
S515	1-571-760-11	SWITCH, KEY BOARD (DBFB)	
		< VIBRATOR >	
X501	1-577-101-11	VIBRATOR, CERAMIC (4.19MHz)	
**********			
*	1-647-784-11	LEAF SW (A) BOARD **********	
	4-352-844-01	PIN, LEAD, COATING	
		< CONNECTOR >	
* CN1001	1-568-943-11	PIN, CONNECTOR 5P	
		< SWITCH >	
S1001	1-571-736-11	SWITCH, LEAF (A MOTOR)	
S1002	1-571-736-11	SWITCH, LEAF (A PLAY)	
S1004	1-692-997-11	SWITCH, LEAF (A CrO2)	
**********			
*	1-647-785-11	LEAF SW (B) BOARD **********	
		< CONNECTOR >	
* CN2001	1-568-944-11	PIN, CONNECTOR 6P	
		< SWITCH >	
S2001	1-571-736-11	SWITCH, LEAF (B MOTOR)	
S2002	1-571-736-11	SWITCH, LEAF (B PLAY)	
S2003	1-571-736-11	SWITCH, LEAF (B REC)	

Ref.No.	Part No.	Description				Remark
S2004	1-692-997-11	SWITCH, LEAF (B CrO2)				
**********						
*	1-650-836-11	LOADING BOARD				
		**********				
		< CONNECTOR >				
* CN291	1-568-943-11	PIN, CONNECTOR 5P				
		< SWITCH >				
S291	1-572-086-11	SWITCH, LEAF (LOAD OUT)				
S292	1-572-086-11	SWITCH, LEAF (LOAD IN)				
**********						
*	A-4378-582-A	MAIN BOARD, COMPLETE (AEP)				
		**********				
*	A-4378-583-A	MAIN BOARD, COMPLETE (G, IT)				
		**********				
		< CAPACITOR >				
C1	1-162-195-31	CERAMIC	4.7PF	10%	50V	
C2	1-126-964-11	ELECT	10uF	20%	50V	
C3	1-162-306-11	CERAMIC	0.01uF	30%	16V	
C5	1-164-159-11	CERAMIC	0.1uF		50V	
C6	1-164-159-11	CERAMIC	0.1uF		50V	(AEP)
C7	1-162-198-31	CERAMIC	8.2PF	10%	50V	
C8	1-164-159-11	CERAMIC	0.1uF		50V	(AEP)
C9	1-162-280-31	CERAMIC	82PF	10%	50V	(AEP)
C10	1-164-159-11	CERAMIC	0.1uF		50V	
C12	1-102-120-00	CERAMIC	0.0018uF	10%	50V	(AEP)
C13	1-162-301-11	CERAMIC	0.0015uF	30%	16V	(AEP)
C21	1-162-205-31	CERAMIC	18PF	5%	50V	
C22	1-162-205-31	CERAMIC	18PF	5%	50V	
C23	1-162-306-11	CERAMIC	0.01uF	30%	16V	
C24	1-162-306-11	CERAMIC	0.01uF	30%	16V	
C25	1-162-306-11	CERAMIC	0.01uF	30%	16V	
C26	1-126-964-11	ELECT	10uF	20%	50V	
C27	1-162-306-11	CERAMIC	0.01uF	30%	16V	
C28	1-162-306-11	CERAMIC	0.01uF	30%	16V	
C29	1-162-306-11	CERAMIC	0.01uF	30%	16V	
C30	1-126-964-11	ELECT	10uF	20%	50V	
C31	1-124-925-11	ELECT	2.2uF	20%	100V	
C32	1-136-153-00	FILM	0.01uF	5%	50V	
C33	1-124-463-00	ELECT	0.1uF	20%	50V	
C34	1-124-902-00	ELECT	0.47uF	20%	50V	(AEP)
C35	1-136-157-00	FILM	0.022uF	5%	50V	(AEP)
C36	1-136-157-00	FILM	0.022uF	5%	50V	(AEP)
C51	1-126-964-11	ELECT	10uF	20%	50V	
C52	1-162-306-11	CERAMIC	0.01uF	30%	16V	
C53	1-162-282-31	CERAMIC	100PF	10%	50V	
C54	1-162-306-11	CERAMIC	0.01uF	30%	16V	
C55	1-162-306-11	CERAMIC	0.01uF	30%	16V	
C57	1-124-925-11	ELECT	2.2uF	20%	100V	
C58	1-124-903-11	ELECT	1uF	20%	50V	
C59	1-162-306-11	CERAMIC	0.01uF	30%	16V	
C60	1-124-903-11	ELECT	1uF	20%	50V	
C61	1-137-438-11	FILM	0.0082uF	5%	50V	
C62	1-137-438-11	FILM	0.0082uF	5%	50V	
C63	1-124-903-11	ELECT	1uF	20%	50V	
C64	1-124-903-11	ELECT	1uF	20%	50V	
C68	1-162-600-11	CERAMIC	0.0047uF	30%	16V	
C69	1-162-600-11	CERAMIC	0.0047uF	30%	16V	
C73	1-124-903-11	ELECT	1uF	20%	50V	
C74	1-162-291-31	CERAMIC	560PF	10%	50V	
C75	1-162-600-11	CERAMIC	0.0047uF	30%	16V	
C76	1-126-964-11	ELECT	10uF	20%	50V	
C77	1-162-306-11	CERAMIC	0.01uF	30%	16V	
C78	1-126-111-11	ELECT	3.3uF	20%	50V	
C79	1-162-306-11	CERAMIC	0.01uF	30%	16V	
C80	1-162-306-11	CERAMIC	0.01uF	30%	16V	
C81	1-162-306-11	CERAMIC	0.01uF	30%	16V	
C82	1-162-207-31	CERAMIC	22PF	5%	50V	
C92	1-126-964-11	ELECT	10uF	20%	50V	
C94	1-164-159-11	CERAMIC	0.1uF		50V	
C201	1-136-153-00	FILM	0.01uF	5%	50V	
C202	1-164-159-11	CERAMIC	0.1uF		50V	
C203	1-137-434-11	FILM	0.0018uF	5%	50V	
C204	1-126-964-11	ELECT	10uF	20%	50V	
C205	1-136-155-00	FILM	0.015uF	5%	50V	
C206	1-137-364-11	FILM	0.001uF	5%	50V	
C207	1-126-947-11	ELECT	47uF	20%	35V	
C208	1-164-159-11	CERAMIC	0.1uF		50V	
C209	1-162-306-11	CERAMIC	0.01uF	30%	16V	
C251	1-136-153-00	FILM	0.01uF	5%	50V	
C252	1-164-159-11	CERAMIC	0.1uF		50V	
C253	1-137-434-11	FILM	0.0018uF	5%	50V	
C254	1-126-964-11	ELECT	10uF	20%	50V	
C255	1-136-155-00	FILM	0.015uF	5%	50V	
C256	1-137-364-11	FILM	0.001uF	5%	50V	
C257	1-126-947-11	ELECT	47uF	20%	35V	
C258	1-164-159-11	CERAMIC	0.1uF		50V	
C259	1-162-306-11	CERAMIC	0.01uF	30%	16V	
C260	1-162-290-31	CERAMIC	470PF	10%	50V	
C261	1-164-159-11	CERAMIC	0.1uF		50V	
C278	1-162-306-11	CERAMIC	0.01uF	30%	16V	
C279	1-161-494-00	CERAMIC	0.022uF		25V	
C282	1-164-159-11	CERAMIC	0.1uF		50V	
C283	1-126-964-11	ELECT	10uF	20%	50V	
C284	1-164-159-11	CERAMIC	0.1uF		50V	

MAIN

Ref. No.	Part No.	Description			Remark
C285	1-164-159-11	CERAMIC	0. 1uF		50V
C291	1-124-927-11	ELECT	4. 7uF	20%	100V
C292	1-124-927-11	ELECT	4. 7uF	20%	100V
C293	1-126-926-11	ELECT	1000uF	20%	10V
C294	1-162-306-11	CERAMIC	0. 01uF	30%	16V
C295	1-126-964-11	ELECT	10uF	20%	50V
C296	1-126-925-11	ELECT	470uF	20%	10V
C297	1-126-933-11	ELECT	100uF	20%	16V
C299	1-126-947-11	ELECT	47uF	20%	35V
C301	1-162-293-31	CERAMIC	820PF	10%	50V
C302	1-136-157-00	FILM	0. 022uF	5%	50V
C303	1-126-964-11	ELECT	10uF	20%	50V
C304	1-162-282-31	CERAMIC	100PF	10%	50V
C311	1-162-293-31	CERAMIC	820PF	10%	50V
C312	1-136-157-00	FILM	0. 022uF	5%	50V
C313	1-126-964-11	ELECT	10uF	20%	50V
C314	1-162-282-31	CERAMIC	100PF	10%	50V
C315	1-126-933-11	ELECT	100uF	20%	16V
C321	1-137-368-11	FILM	0. 0047uF	5%	50V
C322	1-124-903-11	ELECT	1uF	20%	50V
C323	1-124-927-11	ELECT	4. 7uF	20%	100V
C324	1-164-159-11	CERAMIC	0. 1uF		50V
C325	1-126-964-11	ELECT	10uF	20%	50V
C326	1-124-903-11	ELECT	1uF	20%	50V
C327	1-124-902-00	ELECT	0. 47uF	20%	50V
C328	1-124-927-11	ELECT	4. 7uF	20%	100V
C329	1-162-291-31	CERAMIC	560PF	10%	50V
C330	1-162-301-11	CERAMIC	0. 0015uF	30%	16V
C331	1-162-209-31	CERAMIC	27PF	5%	50V
C332	1-162-279-31	CERAMIC	75PF	10%	50V
C333	1-162-288-31	CERAMIC	330PF	10%	50V
C334	1-162-283-31	CERAMIC	120PF	10%	50V
C335	1-162-286-31	CERAMIC	220PF	10%	50V
C351	1-126-947-11	ELECT	47uF	20%	35V
C352	1-161-494-00	CERAMIC	0. 022uF		25V
C401	1-162-293-31	CERAMIC	820PF	10%	50V
C402	1-136-157-00	FILM	0. 022uF	5%	50V
C403	1-126-964-11	ELECT	10uF	20%	50V
C404	1-162-282-31	CERAMIC	100PF	10%	50V
C411	1-162-293-31	CERAMIC	820PF	10%	50V
C412	1-136-157-00	FILM	0. 022uF	5%	50V
C413	1-126-964-11	ELECT	10uF	20%	50V
C414	1-162-282-31	CERAMIC	100PF	10%	50V
C415	1-126-933-11	ELECT	100uF	20%	16V
C421	1-137-368-11	FILM	0. 0047uF	5%	50V
C422	1-124-903-11	ELECT	1uF	20%	50V
C423	1-124-927-11	ELECT	4. 7uF	20%	100V
C424	1-164-159-11	CERAMIC	0. 1uF		50V
C425	1-126-964-11	ELECT	10uF	20%	50V
C426	1-124-903-11	ELECT	1uF	20%	50V
C427	1-124-902-00	ELECT	0. 47uF	20%	50V
C428	1-124-927-11	ELECT	4. 7uF	20%	100V
C429	1-162-291-31	CERAMIC	560PF	10%	50V
C430	1-162-301-11	CERAMIC	0. 0015uF	30%	16V
C431	1-162-209-31	CERAMIC	27PF	5%	50V
C432	1-162-279-31	CERAMIC	75PF	10%	50V
C433	1-162-288-31	CERAMIC	330PF	10%	50V
C434	1-162-283-31	CERAMIC	120PF	10%	50V
C435	1-162-286-31	CERAMIC	220PF	10%	50V
C436	1-162-286-31	CERAMIC	220PF	10%	50V
C455	1-126-933-11	ELECT	100uF	20%	16V
C456	1-126-933-11	ELECT	100uF	20%	16V
C459	1-126-964-11	ELECT	10uF	20%	50V
C460	1-126-964-11	ELECT	10uF	20%	50V
C461	1-126-768-11	ELECT	2200uF	20%	16V
C464	1-126-933-11	ELECT	100uF	20%	16V
C465	1-126-933-11	ELECT	100uF	20%	16V
C470	1-164-159-11	CERAMIC	0. 1uF		50V
C471	1-124-925-11	ELECT	2. 2uF	20%	100V
C472	1-136-562-11	FILM	0. 0082uF	5%	630V (AEP)
C472	1-136-601-11	FILM	0. 01uF	5%	630V(G, IT)
C473	1-124-925-11	ELECT	2. 2uF	20%	100V
C474	1-136-153-00	FILM	0. 01uF	5%	50V
C475	1-162-305-11	CERAMIC	0. 0068uF	30%	16V
C476	1-137-436-11	FILM	0. 0039uF	5%	50V
C477	1-137-436-11	FILM	0. 0039uF	5%	50V
C478	1-164-159-11	CERAMIC	0. 1uF		50V
C479	1-126-934-11	ELECT	220uF	20%	16V
C480	1-124-927-11	ELECT	4. 7uF	20%	100V
C481	1-136-555-11	FILM	0. 0022uF	5%	630V (AEP)
C482	1-136-555-11	FILM	0. 0022uF	5%	630V (AEP)
C491	1-124-927-11	ELECT	4. 7uF	20%	100V
C492	1-124-903-11	ELECT	1uF	20%	50V
C493	1-124-927-11	ELECT	4. 7uF	20%	100V
C494	1-124-903-11	ELECT	1uF	20%	50V
C495	1-126-964-11	ELECT	10uF	20%	50V
C496	1-124-925-11	ELECT	2. 2uF	20%	100V
C622	1-162-282-31	CERAMIC	100PF	10%	50V
C623	1-162-215-31	CERAMIC	47PF	5%	50V
C624	1-164-159-11	CERAMIC	0. 1uF		50V
C632	1-162-282-31	CERAMIC	100PF	10%	50V
C633	1-162-215-31	CERAMIC	47PF	5%	50V
C634	1-164-159-11	CERAMIC	0. 1uF		50V
C642	1-126-964-11	ELECT	10uF	20%	50V
C643	1-126-964-11	ELECT	10uF	20%	50V
C730	1-164-159-11	CERAMIC	0. 1uF		50V
C734	1-164-159-11	CERAMIC	0. 1uF		50V
C735	1-164-159-11	CERAMIC	0. 1uF		50V
C750	1-162-282-31	CERAMIC	100PF	10%	50V
C751	1-162-282-31	CERAMIC	100PF	10%	50V

Ref.No.	Part No.	Description				Remark
C752	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C753	1-124-927-11	ELECT	4.7uF	20%	100V	
C754	1-137-437-11	FILM	0.0056uF	5%	50V	
C755	1-137-365-11	FILM	0.0015uF	5%	50V	
C756	1-164-159-11	CERAMIC	0.1uF		50V	
C757	1-124-925-11	ELECT	2.2uF	20%	100V	
C759	1-164-159-11	CERAMIC	0.1uF		50V	
C766	1-164-159-11	CERAMIC	0.1uF		50V	
C770	1-162-282-31	CERAMIC	100PF	10%	50V	
C771	1-162-282-31	CERAMIC	100PF	10%	50V	
C772	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C773	1-124-927-11	ELECT	4.7uF	20%	100V	
C774	1-137-437-11	FILM	0.0056uF	5%	50V	
C775	1-137-365-11	FILM	0.0015uF	5%	50V	
C777	1-124-925-11	ELECT	2.2uF	20%	100V	
C779	1-164-159-11	CERAMIC	0.1uF		50V	
C797	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C999	1-162-211-31	CERAMIC	33PF	5%	50V	
C1001	1-162-205-31	CERAMIC	18PF	5%	50V	
C1008	1-162-282-31	CERAMIC	100PF	10%	50V	
C1009	1-162-306-11	CERAMIC	0.01uF	30%	16V	
C2002	1-162-306-11	CERAMIC	0.01uF	30%	16V	
C2004	1-162-306-11	CERAMIC	0.01uF	30%	16V	
C2005	1-162-306-11	CERAMIC	0.01uF	30%	16V	
C2006	1-162-306-11	CERAMIC	0.01uF	30%	16V	
C2007	1-164-159-11	CERAMIC	0.1uF		50V	
C2008	1-124-903-11	ELECT	1uF	20%	50V	
C4001	1-162-306-11	CERAMIC	0.01uF	30%	16V	
C4002	1-162-306-11	CERAMIC	0.01uF	30%	16V	
C4003	1-162-306-11	CERAMIC	0.01uF	30%	16V	
C4004	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C6001	1-162-282-31	CERAMIC	100PF	10%	50V	
C8001	1-162-282-31	CERAMIC	100PF	10%	50V	
C8002	1-124-122-11	ELECT	100uF	20%	50V	
C8003	1-124-122-11	ELECT	100uF	20%	50V	
C8051	1-162-282-31	CERAMIC	100PF	10%	50V	
		< FILTER >				
CF1	1-567-389-11	FILTER, CERAMIC				
CF2	1-567-389-11	FILTER, CERAMIC				
CF51	1-567-389-11	FILTER, CERAMIC				
		< CONNECTOR >				
* CN201	1-568-839-11	SOCKET, CONNECTOR 23P				
* CN202	1-568-954-11	PIN, CONNECTOR 5P				
* CN251	1-569-779-11	PLUG, CONNECTOR 7P				
* CN301	1-564-507-11	PLUG, CONNECTOR 4P				
* CN302	1-564-509-11	PLUG, CONNECTOR 6P				
CN303	1-564-505-11	PLUG, CONNECTOR 2P				
* CN304	1-564-706-11	PIN, CONNECTOR (SMALL TYPE) 4P				

Ref.No.	Part No.	Description	Remark
* CN411	1-568-449-11	HOUSING, CONNECTOR(PC BOARD)3P	
* CN412	1-568-449-11	HOUSING, CONNECTOR(PC BOARD)3P	
CN601	1-764-294-11	PIN, CONNECTOR (PC BOARD) 32P	
CN602	1-695-693-11	CONNECTOR, FFC(LIF(NON-ZIF))9P	
		< DIODE >	
D21	8-719-933-33	DIODE HZS6A1L	
D51	8-719-987-63	DIODE 1N4148M	
D201	8-719-024-99	DIODE 11ES2-NTA2B	
D221	8-719-987-63	DIODE 1N4148M	
D252	8-719-010-33	DIODE UZ-4.7BSB	
D403	8-719-987-63	DIODE 1N4148M	
D404	8-719-987-63	DIODE 1N4148M	
D405	8-719-987-63	DIODE 1N4148M	
D407	8-719-987-63	DIODE 1N4148M	
D408	8-719-987-63	DIODE 1N4148M	
D409	8-719-987-63	DIODE 1N4148M	
D451	8-719-933-33	DIODE HZS6A1L	
		< FERRITE BEAD >	
* FB801	1-410-858-21	INDUCTOR 0UH	
* FB851	1-410-858-21	INDUCTOR 0UH	
		< FRONTEND >	
FE1	1-693-217-11	FRONT END (4 GANG)	
FE2	1-239-260-11	ENCAPSULATED COMPONENT (G,IT)	
FE2	1-239-261-12	ENCAPSULATED COMPONENT (AEP)	
FE3	1-239-846-11	ENCAPSULATED COMPONENT (AEP)	
		< IC >	
IC21	8-759-175-87	IC LC7218-ST	
IC51	8-759-090-40	IC LA1831	
IC201	8-759-634-51	IC M5218AP	
IC202	8-759-634-51	IC M5218AP	
IC203	8-759-096-75	IC TDA1545AP	
IC251	8-759-821-93	IC LA5601	
IC252	8-759-165-80	IC PST600C-T	
IC255	8-759-822-09	IC LB1641	
IC303	8-759-098-73	IC HA12172NT	
IC304	8-759-261-93	IC NJM4580LD	
IC305	8-759-261-93	IC NJM4580LD	
IC306	8-759-143-54	IC uPC1330HA	
IC351	8-759-284-08	IC TMP87CH46N-4106	
IC407	8-759-240-81	IC TC4081BP	
IC602	8-759-634-50	IC M5218AL	
IC730	8-759-820-62	IC LB1639	
IC750	8-759-634-50	IC M5218AL	
IC751	8-759-000-48	IC MC14052BCP	

MAIN

Ref.No.	Part No.	Description	Remark
		< IFT >	
IFT51	1-404-713-11	TRANSFORMER, IF	
		< JACK >	
J730	1-750-032-11	JACK (DIA. 3.5) (HEADPHONES)	
J750	1-764-767-11	JACK, PIN 2P (PHONO)	
		< COIL >	
L1	1-408-425-00	INDUCTOR 220uH	(AEP)
L21	1-410-482-31	INDUCTOR 100uH	
L51	1-410-496-11	INDUCTOR 1.5mH	
L201	1-410-521-11	INDUCTOR 100uH	
L202	1-410-521-11	INDUCTOR 100uH	
L301	1-410-780-11	INDUCTOR 27mH	
L401	1-410-780-11	INDUCTOR 27mH	
L451	1-408-429-00	INDUCTOR 470uH	
L999	1-408-397-00	INDUCTOR 1uH	
L1001	1-410-521-11	INDUCTOR 100uH	
L1002	1-410-521-11	INDUCTOR 100uH	
		< FILTER >	
LPF51	1-239-845-11	FILTER, LOW PASS	
LPF52	1-239-845-11	FILTER, LOW PASS	
		< TRANSISTOR >	
Q1	8-729-230-99	TRANSISTOR 2SC2669-OY	
Q2	8-729-230-99	TRANSISTOR 2SC2669-OY	
Q3	8-729-422-57	TRANSISTOR UN4111	
Q4	8-729-119-76	TRANSISTOR 2SA1175-HFE	(AEP)
Q5	8-729-119-76	TRANSISTOR 2SA1175-HFE	(AEP)
Q6	8-729-900-80	TRANSISTOR DTC114ES	(AEP)
Q7	8-729-900-80	TRANSISTOR DTC114ES	(AEP)
Q8	8-729-900-80	TRANSISTOR DTC114ES	(AEP)
Q9	8-729-119-78	TRANSISTOR 2SC2785-HFE	(AEP)
Q21	8-729-202-67	TRANSISTOR 2SK246-GR3	
Q22	8-729-201-84	TRANSISTOR 2SC3112-B	
Q23	8-729-202-67	TRANSISTOR 2SK246-GR3	(AEP)
Q24	8-729-201-84	TRANSISTOR 2SC3112-B	(AEP)
Q53	8-729-900-80	TRANSISTOR DTC114ES	
Q201	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q202	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q203	8-729-900-80	TRANSISTOR DTC114ES	
Q204	8-729-422-57	TRANSISTOR UN4111	
Q205	8-729-422-57	TRANSISTOR UN4111	
Q221	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q251	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q252	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q291	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q301	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q401	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q407	8-729-900-89	TRANSISTOR DTC144ES	
Q408	8-729-900-89	TRANSISTOR DTC144ES	
Q409	8-729-900-89	TRANSISTOR DTC144ES	
Q410	8-729-900-65	TRANSISTOR DTA144ES	
Q411	8-729-900-89	TRANSISTOR DTC144ES	
Q412	8-729-900-89	TRANSISTOR DTC144ES	
Q451	8-729-194-57	TRANSISTOR 2SC945-P	
Q452	8-729-194-57	TRANSISTOR 2SC945-P	
Q453	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q454	8-729-119-78	TRANSISTOR 2SC2785-HFE	
		< RESISTOR >	
R1	1-249-411-11	CARBON 330 5% 1/4W	
R2	1-249-411-11	CARBON 330 5% 1/4W	
R3	1-247-891-00	CARBON 330K 5% 1/4W	
R4	1-249-411-11	CARBON 330 5% 1/4W	
R5	1-247-891-00	CARBON 330K 5% 1/4W	
R6	1-249-411-11	CARBON 330 5% 1/4W	
R7	1-249-406-11	CARBON 120 5% 1/4W	F
R8	1-249-429-11	CARBON 10K 5% 1/4W	(AEP)
R9	1-249-429-11	CARBON 10K 5% 1/4W	(AEP)
R10	1-249-437-11	CARBON 47K 5% 1/4W	
R11	1-249-429-11	CARBON 10K 5% 1/4W	
R12	1-249-425-11	CARBON 4.7K 5% 1/4W	F (AEP)
R13	1-249-437-11	CARBON 47K 5% 1/4W	(AEP)
R14	1-249-429-11	CARBON 10K 5% 1/4W	(AEP)
R15	1-247-807-31	CARBON 100 5% 1/4W	
R17	1-247-903-00	CARBON 1M 5% 1/4W	(AEP)
R18	1-249-429-11	CARBON 10K 5% 1/4W	(AEP)
R19	1-249-429-11	CARBON 10K 5% 1/4W	(AEP)
R21	1-249-417-11	CARBON 1K 5% 1/4W	F
R22	1-249-417-11	CARBON 1K 5% 1/4W	F
R23	1-249-417-11	CARBON 1K 5% 1/4W	F
R24	1-247-807-31	CARBON 100 5% 1/4W	
R25	1-249-425-11	CARBON 4.7K 5% 1/4W	F
R26	1-249-417-11	CARBON 1K 5% 1/4W	F
R27	1-249-409-11	CARBON 220 5% 1/4W	F
R28	1-247-807-31	CARBON 100 5% 1/4W	
R30	1-249-423-11	CARBON 3.3K 5% 1/4W	F
R31	1-249-414-11	CARBON 560 5% 1/4W	F
R32	1-249-417-11	CARBON 1K 5% 1/4W	F
R33	1-249-410-11	CARBON 270 5% 1/4W	F
R34	1-249-425-11	CARBON 4.7K 5% 1/4W	F
R35	1-249-421-11	CARBON 2.2K 5% 1/4W	F
R36	1-249-425-11	CARBON 4.7K 5% 1/4W	F
R37	1-249-425-11	CARBON 4.7K 5% 1/4W	F
R38	1-247-807-31	CARBON 100 5% 1/4W	
R39	1-249-423-11	CARBON 3.3K 5% 1/4W	F (AEP)
R40	1-249-414-11	CARBON 560 5% 1/4W	F (AEP)

Ref. No.	Part No.	Description					Remark
R41	1-249-417-11	CARBON	1K	5%	1/4W	F	(AEP)
R42	1-249-410-11	CARBON	270	5%	1/4W	F	(AEP)
R43	1-249-433-11	CARBON	22K	5%	1/4W		(AEP)
R44	1-249-421-11	CARBON	2.2K	5%	1/4W	F	(AEP)
R45	1-249-425-11	CARBON	4.7K	5%	1/4W	F	(AEP)
R46	1-249-425-11	CARBON	4.7K	5%	1/4W	F	(AEP)
R47	1-249-417-11	CARBON	1K	5%	1/4W	F	(AEP)
R52	1-249-423-11	CARBON	3.3K	5%	1/4W	F	
R53	1-247-822-11	CARBON	430	5%	1/4W		
R54	1-247-870-11	CARBON	43K	5%	1/4W		
R55	1-249-429-11	CARBON	10K	5%	1/4W		
R56	1-247-842-11	CARBON	3K	5%	1/4W		
R57	1-249-423-11	CARBON	3.3K	5%	1/4W	F	
R58	1-249-437-11	CARBON	47K	5%	1/4W		
R61	1-249-418-11	CARBON	1.2K	5%	1/4W	F	
R62	1-249-418-11	CARBON	1.2K	5%	1/4W	F	
R65	1-249-429-11	CARBON	10K	5%	1/4W		
R66	1-249-429-11	CARBON	10K	5%	1/4W		
R67	1-249-437-11	CARBON	47K	5%	1/4W		
R69	1-249-399-11	CARBON	33	5%	1/4W	F	
R70	1-249-413-11	CARBON	470	5%	1/4W	F	
R91	1-247-807-31	CARBON	100	5%	1/4W		
R201	1-249-425-11	CARBON	4.7K	5%	1/4W	F	
R202	1-249-411-11	CARBON	330	5%	1/4W		
R203	1-249-416-11	CARBON	820	5%	1/4W	F	
R204	1-247-842-11	CARBON	3K	5%	1/4W		
R205	1-249-420-11	CARBON	1.8K	5%	1/4W	F	
R206	1-249-424-11	CARBON	3.9K	5%	1/4W	F	
R207	1-249-420-11	CARBON	1.8K	5%	1/4W	F	
R208	1-247-838-00	CARBON	2K	5%	1/4W		
R209	1-249-417-11	CARBON	1K	5%	1/4W	F	
R210	1-249-441-11	CARBON	100K	5%	1/4W		
R211	1-249-417-11	CARBON	1K	5%	1/4W	F	
R212	1-249-425-11	CARBON	4.7K	5%	1/4W	F	
R215	1-249-411-11	CARBON	330	5%	1/4W		
R220	1-249-437-11	CARBON	47K	5%	1/4W		
R221	1-249-429-11	CARBON	10K	5%	1/4W		
R223	1-249-429-11	CARBON	10K	5%	1/4W		
R224	1-249-425-11	CARBON	4.7K	5%	1/4W	F	
R225	1-249-417-11	CARBON	1K	5%	1/4W	F	
R226	1-249-417-11	CARBON	1K	5%	1/4W	F	
R227	1-249-417-11	CARBON	1K	5%	1/4W	F	
R228	1-249-417-11	CARBON	1K	5%	1/4W	F	
R229	1-249-413-11	CARBON	470	5%	1/4W	F	
R230	1-249-413-11	CARBON	470	5%	1/4W	F	
R231	1-249-417-11	CARBON	1K	5%	1/4W	F	
R232	1-247-807-31	CARBON	100	5%	1/4W		
R233	1-249-413-11	CARBON	470	5%	1/4W	F	
R234	1-249-413-11	CARBON	470	5%	1/4W	F	
R235	1-249-413-11	CARBON	470	5%	1/4W	F	

Ref. No.	Part No.	Description					Remark
R236	1-249-413-11	CARBON	470	5%	1/4W	F	
R237	1-249-437-11	CARBON	47K	5%	1/4W		
R251	1-249-425-11	CARBON	4.7K	5%	1/4W	F	
R252	1-249-411-11	CARBON	330	5%	1/4W		
R253	1-249-416-11	CARBON	820	5%	1/4W	F	
R254	1-247-842-11	CARBON	3K	5%	1/4W		
R255	1-249-420-11	CARBON	1.8K	5%	1/4W	F	
R256	1-249-424-11	CARBON	3.9K	5%	1/4W	F	
R257	1-249-420-11	CARBON	1.8K	5%	1/4W	F	
R258	1-247-838-00	CARBON	2K	5%	1/4W		
R259	1-249-417-11	CARBON	1K	5%	1/4W	F	
R260	1-249-441-11	CARBON	100K	5%	1/4W		
R261	1-249-417-11	CARBON	1K	5%	1/4W	F	
R262	1-249-425-11	CARBON	4.7K	5%	1/4W	F	
R265	1-249-411-11	CARBON	330	5%	1/4W		
R280	1-249-429-11	CARBON	10K	5%	1/4W		
R281	1-249-431-11	CARBON	15K	5%	1/4W		
R282	1-249-434-11	CARBON	27K	5%	1/4W		
R283	1-249-434-11	CARBON	27K	5%	1/4W		
R291	1-249-437-11	CARBON	47K	5%	1/4W		
R292	1-249-424-11	CARBON	3.9K	5%	1/4W	F	
R293	1-249-417-11	CARBON	1K	5%	1/4W	F	
⚠R299	1-212-950-00	FUSIBLE	4.7	5%	1/2W	F	
R301	1-247-889-00	CARBON	270K	5%	1/4W		
R302	1-249-404-00	CARBON	82	5%	1/4W	F	
R303	1-247-882-11	CARBON	130K	5%	1/4W		
R304	1-247-850-11	CARBON	6.2K	5%	1/4W		
R311	1-247-889-00	CARBON	270K	5%	1/4W		
R312	1-249-404-00	CARBON	82	5%	1/4W	F	
R313	1-247-882-11	CARBON	130K	5%	1/4W		
R314	1-247-850-11	CARBON	6.2K	5%	1/4W		
R316	1-249-433-11	CARBON	22K	5%	1/4W		
R321	1-249-429-11	CARBON	10K	5%	1/4W		
R322	1-249-431-11	CARBON	15K	5%	1/4W		
R323	1-249-423-11	CARBON	3.3K	5%	1/4W	F	
R324	1-249-417-11	CARBON	1K	5%	1/4W	F	
R325	1-249-414-11	CARBON	560	5%	1/4W	F	
R326	1-249-425-11	CARBON	4.7K	5%	1/4W	F	
R327	1-249-433-11	CARBON	22K	5%	1/4W		
R328	1-249-417-11	CARBON	1K	5%	1/4W	F	
R331	1-249-430-11	CARBON	12K	5%	1/4W		
R350	1-249-431-11	CARBON	15K	5%	1/4W		
R351	1-249-431-11	CARBON	15K	5%	1/4W		
R355	1-249-431-11	CARBON	15K	5%	1/4W		
R366	1-249-429-11	CARBON	10K	5%	1/4W		
R367	1-249-429-11	CARBON	10K	5%	1/4W		
R368	1-249-425-11	CARBON	4.7K	5%	1/4W	F	
R369	1-249-425-11	CARBON	4.7K	5%	1/4W	F	
R370	1-249-429-11	CARBON	10K	5%	1/4W		
R401	1-247-889-00	CARBON	270K	5%	1/4W		

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

MAIN

Ref. No.	Part No.	Description				Remark
R402	1-249-404-00	CARBON	82	5%	1/4W	F
R403	1-247-882-11	CARBON	130K	5%	1/4W	
R404	1-247-850-11	CARBON	6.2K	5%	1/4W	
R411	1-247-889-00	CARBON	270K	5%	1/4W	
R412	1-249-404-00	CARBON	82	5%	1/4W	F
R413	1-247-882-11	CARBON	130K	5%	1/4W	
R414	1-247-850-11	CARBON	6.2K	5%	1/4W	
R416	1-249-433-11	CARBON	22K	5%	1/4W	
R421	1-249-429-11	CARBON	10K	5%	1/4W	
R422	1-249-431-11	CARBON	15K	5%	1/4W	
R423	1-249-423-11	CARBON	3.3K	5%	1/4W	F
R424	1-249-417-11	CARBON	1K	5%	1/4W	F
R425	1-249-414-11	CARBON	560	5%	1/4W	F
R426	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R427	1-249-433-11	CARBON	22K	5%	1/4W	
R428	1-249-417-11	CARBON	1K	5%	1/4W	F
R431	1-249-430-11	CARBON	12K	5%	1/4W	
R441	1-249-433-11	CARBON	22K	5%	1/4W	
R442	1-247-807-31	CARBON	100	5%	1/4W	
R443	1-249-433-11	CARBON	22K	5%	1/4W	
R444	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R445	1-249-437-11	CARBON	47K	5%	1/4W	
R446	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R447	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R448	1-249-433-11	CARBON	22K	5%	1/4W	
R449	1-249-438-11	CARBON	56K	5%	1/4W	
R450	1-249-437-11	CARBON	47K	5%	1/4W	
R451	1-249-389-11	CARBON	4.7	5%	1/4W	F
R452	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R453	1-249-409-11	CARBON	220	5%	1/4W	F
R454	1-249-409-11	CARBON	220	5%	1/4W	F
R461	1-249-432-11	CARBON	18K	5%	1/4W	
R462	1-247-876-11	CARBON	75K	5%	1/4W	
R463	1-249-432-11	CARBON	18K	5%	1/4W	
R464	1-249-437-11	CARBON	47K	5%	1/4W	
R465	1-249-437-11	CARBON	47K	5%	1/4W	
R466	1-249-437-11	CARBON	47K	5%	1/4W	
R467	1-247-864-11	CARBON	24K	5%	1/4W	
R468	1-249-433-11	CARBON	22K	5%	1/4W	
R469	1-249-433-11	CARBON	22K	5%	1/4W	
R470	1-249-433-11	CARBON	22K	5%	1/4W	
R471	1-249-424-11	CARBON	3.9K	5%	1/4W	F
R472	1-249-429-11	CARBON	10K	5%	1/4W	
R473	1-249-434-11	CARBON	27K	5%	1/4W	
R474	1-249-434-11	CARBON	27K	5%	1/4W	
R476	1-247-856-00	CARBON	11K	5%	1/4W	(G, IT)
R476	1-249-430-11	CARBON	12K	5%	1/4W	(AEP)
R479	1-249-433-11	CARBON	22K	5%	1/4W	
R481	1-215-905-11	METAL OXIDE	10	5%	3W	F
R482	1-249-427-11	CARBON	6.8K	5%	1/4W	F
R483	1-249-418-11	CARBON	1.2K	5%	1/4W	F
R484	1-249-441-11	CARBON	100K	5%	1/4W	(AEP)
R485	1-249-437-11	CARBON	47K	5%	1/4W	(AEP)
R493	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R495	1-247-883-00	CARBON	150K	5%	1/4W	
R496	1-247-887-00	CARBON	220K	5%	1/4W	
R621	1-249-437-11	CARBON	47K	5%	1/4W	
R623	1-249-437-11	CARBON	47K	5%	1/4W	
R631	1-249-437-11	CARBON	47K	5%	1/4W	
R633	1-249-437-11	CARBON	47K	5%	1/4W	
R730	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R731	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R732	1-249-412-11	CARBON	390	5%	1/4W	F
R733	1-249-412-11	CARBON	390	5%	1/4W	F
R734	1-249-389-11	CARBON	4.7	5%	1/4W	F
R735	1-249-389-11	CARBON	4.7	5%	1/4W	F
R750	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R751	1-249-437-11	CARBON	47K	5%	1/4W	
R752	1-249-415-11	CARBON	680	5%	1/4W	F
R753	1-247-897-11	CARBON	560K	5%	1/4W	
R754	1-249-437-11	CARBON	47K	5%	1/4W	
R770	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R771	1-249-437-11	CARBON	47K	5%	1/4W	
R772	1-249-415-11	CARBON	680	5%	1/4W	F
R773	1-247-897-11	CARBON	560K	5%	1/4W	
R774	1-249-437-11	CARBON	47K	5%	1/4W	
R780	1-249-429-11	CARBON	10K	5%	1/4W	
R781	1-249-429-11	CARBON	10K	5%	1/4W	
R1001	1-247-807-31	CARBON	100	5%	1/4W	

< VARIABLE RESISTOR >

RV51	1-238-019-11	RES, ADJ, CARBON 47K
RV301	1-241-630-11	RES, ADJ, CARBON 10K
RV303	1-241-630-11	RES, ADJ, CARBON 10K
RV304	1-241-767-21	RES, ADJ, CARBON 100K
RV311	1-241-630-11	RES, ADJ, CARBON 10K
RV401	1-241-630-11	RES, ADJ, CARBON 10K
RV403	1-241-630-11	RES, ADJ, CARBON 10K
RV404	1-241-767-21	RES, ADJ, CARBON 100K
RV411	1-241-630-11	RES, ADJ, CARBON 10K
RV451	1-241-762-11	RES, ADJ, CARBON 2.2K
RV730	1-223-652-12	RES, VAR, CARBON 100K/100K (VOLUME)

< SWITCH >

S301	1-572-185-11	SWITCH, SLIDE (ISS) (AEP)

< TRANSFORMER >

T51	1-236-465-11	ENCAPSULATED COMPONENT
T401	1-433-349-11	TRANSFORMER, BIAS OSCILLATION

Ref. No.	Part No.	Description			Remark
		< TERMINAL >			
TB1	1-537-488-11	TERMINAL BOARD (ANT)			
* TB2	4-925-530-01	PLATE, GROUND (ANTENNA)			
TM730	1-537-238-11	TERMINAL BOARD (SPEAKER)			
		< VIBRATOR >			
X21	1-579-585-11	VIBRATOR, CRYSTAL (7.2MHz)			
X51	1-579-777-11	DISCRIMINATOR, CERAMIC (10.7MHz)			
X52	1-577-075-11	OSCILLATOR, CERAMIC (456kHz)			
X351	1-579-125-11	VIBRATOR, CERAMIC (8MHz)			
**********					
*	A-4371-543-A	POWER BOARD, COMPLETE (G, IT)			
		**********			
*	A-4378-676-A	POWER BOARD, COMPLETE (AEP)			
		**********			
		< CAPACITOR >			
C802	1-124-925-11	ELECT	2.2uF	20%	100V
C803	1-162-282-31	CERAMIC	100PF	10%	50V
C804	1-128-551-11	ELECT	22uF	20%	50V
C805	1-126-964-11	ELECT	10uF	20%	50V
C807	1-164-159-11	CERAMIC	0.1uF		50V
C808	1-164-159-11	CERAMIC	0.1uF		50V
C809	1-162-282-31	CERAMIC	100PF	10%	50V
C810	1-126-964-11	ELECT	10uF	20%	50V
C811	1-126-933-11	ELECT	100uF	20%	16V
C812	1-126-933-11	ELECT	100uF	20%	16V
C852	1-124-925-11	ELECT	2.2uF	20%	100V
C853	1-162-282-31	CERAMIC	100PF	10%	50V
C854	1-128-551-11	ELECT	22uF	20%	50V
C855	1-126-964-11	ELECT	10uF	20%	50V
C857	1-164-159-11	CERAMIC	0.1uF		50V
C858	1-164-159-11	CERAMIC	0.1uF		50V
C859	1-162-282-31	CERAMIC	100PF	10%	50V
C860	1-126-964-11	ELECT	10uF	20%	50V
C901	1-126-954-11	ELECT	3300uF	20%	35V
C902	1-126-953-11	ELECT	2200uF	20%	35V
C903	1-164-159-11	CERAMIC	0.1uF		50V
C904	1-164-159-11	CERAMIC	0.1uF		50V
C905	1-164-159-11	CERAMIC	0.1uF		50V
C910	1-126-964-11	ELECT	10uF	20%	50V
C911	1-126-964-11	ELECT	10uF	20%	50V
C912	1-124-927-11	ELECT	4.7uF	20%	100V
C913	1-124-927-11	ELECT	4.7uF	20%	100V
C914	1-124-903-11	ELECT	1uF	20%	50V
C915	1-124-927-11	ELECT	4.7uF	20%	100V
C916	1-124-927-11	ELECT	4.7uF	20%	100V
C917	1-162-306-11	CERAMIC	0.01uF	30%	16V
C918	1-126-964-11	ELECT	10uF	20%	50V
C919	1-162-306-11	CERAMIC	0.01uF	30%	16V
C920	1-126-964-11	ELECT	10uF	20%	50V
C921	1-126-969-11	ELECT	220uF	20%	50V
C922	1-164-159-11	CERAMIC	0.1uF		50V
C923	1-164-159-11	CERAMIC	0.1uF		50V
C924	1-126-964-11	ELECT	10uF	20%	50V
C925	1-126-964-11	ELECT	10uF	20%	50V
C926	1-126-964-11	ELECT	10uF	20%	50V
C9001	1-162-306-11	CERAMIC	0.01uF	30%	16V
C9002	1-162-306-11	CERAMIC	0.01uF	30%	16V
C9003	1-162-306-11	CERAMIC	0.01uF	30%	16V
		< CONNECTOR >			
CN901	1-695-657-11	CONNECTOR, FFC (LIF(NON-ZIF)) 9P			
* CN902	1-568-950-11	PIN, CONNECTOR 12P			
* CN903	1-580-230-31	PIN, CONNECTOR (PC BOARD) 2P			
		< DIODE >			
D801	8-719-987-63	DIODE 1N4148M			
D802	8-719-987-63	DIODE 1N4148M			
D901	8-719-933-41	DIODE HZS6C3L			
D902	8-719-933-50	DIODE HZS7C2L			
D903	8-719-024-99	DIODE 11ES2-NTA2B			
D904	8-719-934-22	LED HZS30-2L			
D905	8-719-014-74	DIODE UZP-6.2B			
D906	8-719-025-03	DIODE RBA-402-SL			
		< FERRITE BEAD >			
* FB901	1-410-858-21	INDUCTOR 0UH			
* FB903	1-410-858-21	INDUCTOR 0UH			
		< FUSE HOLDER >			
FH903	1-533-217-31	HOLDER, FUSE			
FH904	1-533-217-31	HOLDER, FUSE			
		< IC >			
IC801	8-759-502-31	IC SI-18751			
IC851	8-759-502-31	IC SI-18751			
IC901	8-759-602-66	IC M5230L-A			
		< IC LINK >			
⚠ICP912	1-532-847-21	LINK, IC 6.3A (H490:AEP/H490M:AEP)			
⚠ICP913	1-532-847-21	LINK, IC 6.3A (H490:AEP/H490M:AEP)			
		< TRANSISTOR >			
Q801	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q802	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q803	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q804	8-729-119-78	TRANSISTOR 2SC2785-HFE			

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description				Remark
Q901	8-729-209-15	TRANSISTOR	2SD2012			
Q902	8-729-141-83	TRANSISTOR	2SB1094-LK			
Q903	8-729-900-80	TRANSISTOR	DTC114ES			
Q904	8-729-209-15	TRANSISTOR	2SD2012			
Q905	8-729-209-15	TRANSISTOR	2SD2012			
Q906	8-729-141-83	TRANSISTOR	2SB1094-LK			
		< RESISTOR >				
R801	1-249-417-11	CARBON	1K	5%	1/4W	F
R802	1-249-437-11	CARBON	47K	5%	1/4W	
R803	1-249-435-11	CARBON	33K	5%	1/4W	
R804	1-249-416-11	CARBON	820	5%	1/4W	F
R805	1-247-903-00	CARBON	1M	5%	1/4W	
R806	1-249-438-11	CARBON	56K	5%	1/4W	
R809	1-249-389-11	CARBON	4.7	5%	1/4W	F
R810	1-249-441-11	CARBON	100K	5%	1/4W	
R811	1-249-389-11	CARBON	4.7	5%	1/4W	F
R812	1-249-438-11	CARBON	56K	5%	1/4W	
R851	1-249-417-11	CARBON	1K	5%	1/4W	F
R852	1-249-437-11	CARBON	47K	5%	1/4W	
R853	1-249-435-11	CARBON	33K	5%	1/4W	
R854	1-249-416-11	CARBON	820	5%	1/4W	F
R855	1-247-903-00	CARBON	1M	5%	1/4W	
R856	1-249-437-11	CARBON	47K	5%	1/4W	
R859	1-249-389-11	CARBON	4.7	5%	1/4W	F
R901	1-247-807-31	CARBON	100	5%	1/4W	
R902	1-249-432-11	CARBON	18K	5%	1/4W	
R903	1-247-856-00	CARBON	11K	5%	1/4W	
R904	1-249-432-11	CARBON	18K	5%	1/4W	
R905	1-247-842-11	CARBON	3K	5%	1/4W	
R906	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R907	1-249-414-11	CARBON	560	5%	1/4W	F
R908	1-249-429-11	CARBON	10K	5%	1/4W	
R909	1-249-422-11	CARBON	2.7K	5%	1/4W	F
R910	1-247-903-00	CARBON	1M	5%	1/4W	
⚠R914	1-212-934-00	FUSIBLE	1	5%	1/2W	F
⚠R915	1-212-934-00	FUSIBLE	1	5%	1/2W	F
⚠R916	1-212-934-00	FUSIBLE	1	5%	1/2W	F
⚠R917	1-202-972-61	FUSIBLE	1	5%	1/4W	F
⚠R918	1-202-972-61	FUSIBLE	1	5%	1/4W	F
⚠R919	1-212-934-00	FUSIBLE	1	5%	1/2W	F
		< RELAY >				
RY801	1-515-920-11	RELAY (24V)				
		< TERMINAL >				
* TB901	4-925-530-01	PLATE, GROUND				

****

Ref. No.	Part No.	Description	Remark
		MISCELLANEOUS	
		**********	
9	1-501-594-21	ANTENNA (FM) (H490)	
62	1-765-125-11	WIRE (FLAT TYPE) (9 CORE)	
63	1-765-124-11	WIRE (FLAT TYPE) (23 CORE)	
306	1-575-001-11	WIRE, FLAT TYPE (12 CORE)	
ANT1	1-501-321-51	ANTENNA, TELESCOPIC (H490)	
⚠CNP901	1-575-651-91	CORD, POWER	
⚠F902	1-532-284-00	FUSE (T630mA/250V)	
HE1	1-543-673-11	HEAD, MAGNETIC (ERASE) (DECK:B)	
HP1	1-543-319-11	HEAD, MAGNETIC (PB) (DECK:A)	
HRP1	1-543-319-11	HEAD, MAGNETIC (REC/PB) (DECK:B)	
M1	X-3362-377-1	MOTOR (WH) ASSY	
⚠T901	1-426-657-11	TRANSFORMER, POWER	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

9-959-943-81

Sony Corporation
Consumer A&V Products Company
Home A&V Products Div.

English
95J097544-1
Printed in Germany
© 1995. 10
Published by Home A&V Products Div.
Quality Engineering Dept.